CONTENTS OF VOLUME 107

NUMBER 1

1 Quaternary Depositional Systems in Northern Lake Baikal, Siberia
Stefan Back, Marc De Batist, Manfred R. Strecker, and Pieter Vanhauwaert

13 Reevaluation of Plate Motion Models Based on Hotspot Tracks in the Atlantic and Indian Oceans
Ajoy K. Baksi

27 Volatile-Assisted Intrusion and Autometasomatism of Leucogranites in the Khumbu Himalaya, Nepal
Roberto F. Weinberg and Mike P. Searle

49 $^{40}Ar/^{39}Ar$ Thermochronology of Mesoproterozoic Metamorphism in the Colorado Front Range
Colin A. Shaw, Lawrence W. Snee, Jane Selverstone, and John C. Reed, Jr.

69 U-Pb Ages for Zircon and Titanite from the Ramagiri Area, Southern India: Evidence for Accretionary Origin of the Eastern Dharwar Craton during the Late Archean
S. Balakrishnan, V. Rajamani, and G. N. Hanson

87 Nd Isotopes in the Stratigraphic Record of the Montagne Noire (French Massif Central): No Significant Paleozoic Juvenile Inputs, and Pre-Hercynian Paleogeography
Frédéric Simien, Maurice Mattauer, and Claude J. Allègre

99 Mathematical Modeling of Basal Coastal Cliff Erosion in Uniform Strata: A Theoretical Approach
A. P. Belov, P. Davies, and A. T. Williams

111 Debris Flow and Hyperconcentrated Flood-Flow Deposits in an Alluvial Fan, Northwestern Part of the Cretaceous Yongdong Basin, Central Korea
Young Kwan Sohn, Chul Woo Rhee, and Bok Chul Kim

133 *Reviews*

NUMBER 2

135 U-Pb Geochronology and Isotope Geochemistry of the Archean and Proterozoic Rocks of North-Central Madagascar
R. D. Tucker, L. D. Ashwal, M. J. Handke, M. A. Hamilton, M. Le Grange, and R. A. Rambeloson

155 The Role of Subduction-Induced Subsidence in the Evolution of the Karoo Basin
Russell N. Pysklywec and Jerry X. Mitrovica

165 A New Approach for Paleostress Analysis from Kink Bands: Application of Fault-Slip Methods
Deepak C. Srivastava, Richard J. Lisle, Mohd. Imran, and Rajeev Kandpal

177 The Effect of Hydrothermal Alteration on the Sr and Nd Isotopic Signatures of the Barra do Itapirapuã Carbonatite, Southern Brazil
F. R. D. Andrade, P. Möller, and A. Höhndorf

193 Late Jurassic Oceanic Crust and Upper Cretaceous Caribbean Plateau Picritic Basalts Exposed in the Duarte Igneous Complex, Hispaniola
Henriette Lapierre, Vincent Dupuis, Bernard Mercier de Lépinay, Delphine Bosch, Patrick Monié, Marc Tardy, René C. Maury, Jean Hernandez, Mireille Polvé, Delphine Yeghicheyan, and Joseph Cotten

209 Rock Fragmentation and Particle Size in Crushed Zones by Faulting
Isamu Hattori and Hirofumi Yamamoto

223 Sri Lanka–Madagascar Gondwana Linkage: Evidence for a Pan-African Mineral Belt
C. B. Dissanayake and Rohana Chandrajith

237 1.57-Ga Magmatism in the South Carpathians: Implications for the Pre-Alpine Basement and Evolution of the Mantle under the European Continent
Cristian Drăguşanu and Tsuyoshi Tanaka

249 *Review*

NUMBER 3

251 Climate Change and the Episodicity of Sediment Flux of Small California Rivers
Douglas L. Inman and Scott A. Jenkins

271 Paleomagnetism of the Distal Member of the New Glasgow Formation, Nova Scotia, Canada: New Constraints on Magnetic Polarity Stratigraphy near the Base of the Kiaman Superchron
K. L. Buchan and F. W. Chandler

287 An Ancient Depleted Mantle Sample from a 42-Ma Dike in Montana: Constraints on Persistence of the Lithosphere during Eocene Magmatism
Francis Ö. Dudás and Stephen S. Harlan

301 Trace Element and Isotope Characteristics of Cenozoic Basalts around the Tanlu Fault with Implications for the Eastern Plate Boundary between North and South China
Sun-Lin Chung

313 Effects of the 1997 Flood on the Transport and Storage of Sediment and Mercury within the Carson River Valley, West-Central Nevada
Jerry Miller, Robert Barr, David Grow, Paul Lechler, Dorothea Richardson, Karen Waltman, and John Warwick

329 Tectonothermal Evolution of the Apuseni Mountains, Romania: Resolution of Variscan versus Alpine Events with $^{40}Ar/^{39}Ar$ Ages
R. D. Dallmeyer, D. I. Panã, F. Neubauer, and P. Erdmer

353 Early Carboniferous Unroofing in Western Norway: A Tale of Alkali Feldspar Thermochronology
E. A. Eide, T. H. Torsvik, T. B. Andersen, and N. O. Arnaud

Geological Notes

375 A Jurassic Granite from Southern Georgia, U.S.A.: Silicic, Extension-Related Magmatism along the Southeastern Coastal Plain
Ann L. Heatherington, Paul A. Mueller, and Allen P. Nutman

385 *Review*

NUMBER 4

387 The Crust of the Colorado Plateau: New Views of an Old Arc
Kent C. Condie and Jane Selverstone

399 Mafic Precursors, Peraluminous Granitoids, and Late Lamprophyres in the Avila Batholith: A Model for the Generation of Variscan Batholiths in Iberia
Fernando Bea, Pilar Montero, and José F. Molina

421 The Idea of Magma Mixing: History of a Struggle for Acceptance
Ray E. Wilcox

433 Geochemistry of Mafic Magmas in the Hurricane Volcanic Field, Utah: Implications for Small- and Large-Scale Chemical Variability of the Lithospheric Mantle
Eugene I. Smith, Alexander Sánchez, J. Douglas Walker, and Kefa Wang

449 The Distribution, Style, and Intensity of Alleghanian Metamorphism in South-Central New England: Petrologic Evidence from the Pelham and Willimantic Domes
David P. Moecher

473 Metamorphism, Melting, and Extension: Age Constraints from the High Himalayan Slab of Southeast Zanskar and Northwest Lahaul
J. D. Walker, M. W. Martin, S. A. Bowring, M. P. Searle, D. J. Waters, and K. V. Hodges

Geological Notes

497 A U-Pb Age for the Cambrian Taylor Formation, Antarctica: Implications for the Cambrian Time Scale
John Encarnación, Albert J. Rowell, and Anne M. Grunow

Discussion and Reply

505 Late Jurassic Oceanic Crust and Upper Cretaceous Caribbean Plateau Picritic Basalts Exposed in the Duarte Igneous Complex, Hispaniola: A Discussion
John F. Lewis, Willis E. Hames, and Grenville Draper

509 Late Jurassic Oceanic Crust and Upper Cretaceous Caribbean Plateau Picritic Basalts Exposed in the Duarte Igneous Complex, Hispaniola: A Reply
Henriette Lapierre, V. Dupuis, B. Mercier de Lépinay, D. Bosch, P. Monié, M. Tardy, R. C. Maury, J. Hernandez, M. Polvé, D. Yeghicheyan, and J. Cotten

513 *Review*

NUMBER 5

515 Plate Tectonics at 3.8–3.7 Ga: Field Evidence from the Isua Accretionary Complex, Southern West Greenland
Tsuyoshi Komiya, Shigenori Maruyama, Toshiaki Masuda, Susumu Nohda, Mamoru Hayashi, and Kazuaki Okamoto

555 U-Pb Geochronology of Devonian Granites in the Meguma Terrane of Nova Scotia, Canada: Evidence for Hotspot Melting of a Neoproterozoic Source
J. Duncan Keppie and T. E. Krogh

569 Detrital Zircon Geochronology: New Evidence for an Old Model for Accretion of the Southwest Baltic Shield
Geert-Jan L. M. de Haas, Tom Andersen, and Jessica Vestin

587 Tectonic Evolution of the Careón Ophiolite (Northwest Spain): A Remnant of Oceanic Lithosphere in the Variscan Belt
Florentino Díaz García, Ricardo Arenas, José R. Martínez Catalán, José González del Tánago, and Greg R. Dunning

607 Tsunami(?) Sculpturing of the Pebble Beach Wave-Cut Platform, Crescent City Area, California
K. R. Aalto, R. Aalto, C. E. Garrison-Laney, and H. F. Abramson

Geological Notes

623 Southern Tibet Detachment System at Khula Kangri, Eastern Himalaya: A Large-Area, Shallow Detachment Stretching into Bhutan?
M. A. Edwards, A. Pêcher, W. S. F. Kidd, B. C. Burchfiel, and L. H. Royden

633 Formation of Ephemeral Bedform Turrets in Coastal Foredunes
D. W. T. Jackson and J. A. G. Cooper

641 *Reviews*

NUMBER 6

643 Depositional Cyclicity in the Lower Devonian Helderberg Group of New York State
Nathaniel W. Diedrich and Bruce H. Wilkinson

659 Tertiary Normal Faulting in the Canyon Range, Eastern Sevier Desert
Stewart Wills and Mark H. Anders

683 Lithospheric Mantle Deformation beneath the Indian Cratons
O. P. Pandey and P. K. Agrawal

693 Structural Evolution of the Tuzgölü Basin in Central Anatolia, Turkey
İbrahim Çemen, M. Cemal Göncüoglu, and Kadir Dirik

Geological Notes

707 Lethal Sandslides from Eolian Dunes
David B. Loope, Joseph A. Mason, and Lowell Dingus

715 Lode Gold Deposits and Archean Mantle Plume–Island Arc Interaction, Abitibi Subprovince, Canada
Derek A. Wyman, Robert Kerrich, and David I. Groves

727 Late Cenozoic Reverse Faulting in the Fall Zone, Southeastern Virginia
Carl R. Berquist, Jr., and Christopher M. Bailey

Discussion and Reply

733 1.57-Ga Magmatism in the South Carpathians: Implications for the Pre-Alpine Basement and Evolution of the Mantle under the European Continent: A Discussion
Mihai Ducea

736 1.57-Ga Magmatism in the South Carpathians: Implications for the Pre-Alpine Basement and Evolution of the Mantle under the European Continent: A Reply
Cristian Drăguşanu and Tsuyoshi Tanaka

739 *Reviews*

741 *Index to Volume 107*

745 *Contents of Volume 107*